

McCalla. 2 Dept. Agric.

3/ Publication No. 111

5M - 10 - 55

COP. AL. 1262



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A Guide to Successful TREE PLANTING

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FIELD CROPS BRANCH

Distributed by

Extension Service

EDMONTON

Printed by A. SHNITKA, Queen's Printer for Alberta, 1955

A Guide to Successful Tree Planting

By P. D. McCALLA,
Supervisor of Horticulture.

The uses of trees are many, and a country from which the forests have been destroyed becomes uninhabitable and worthless to mankind. China, India and Greece are only three examples of countries that carried out a ruthless policy of tree destruction. We all know the economic and social problems these countries are faced with today.

One mile of good windbreak 18 feet high will protect about fifty acres of land. **A good rule of thumb** when estimating the area protected by trees is that the land to the leeward side of a shelterbelt will be protected to a distance equal to ten times the height of the trees.

WHERE TREES CAN BE OBTAINED:

Trees can be obtained from the Federal Forest Nursery Station, Indian Head, Saskatchewan, **provided the order is received one year prior to planting**, and the land has been summerfallowed for one year.

Caragana, ash elm, and Manitoba maple are available from Indian Head in unlimited quantities. Limited numbers of willow and poplar may also may be obtained. Evergreens cost 1c per tree and the applicant is limited to 200 trees per year. All these are sent express collect.

Trees can also be obtained, express collect, from the Alberta Department of Agriculture, Legislative Buildings, Edmonton. These are available at present in only limited numbers, and similar to the above, **the land for which they are intended must have been summer-fallowed for one year.**

PLANTING:

The usual method of planting is with a plough. A furrow is turned and the trees planted, then a second furrow is opened, throwing the soil over the roots of the planted trees. To pack the soil around the roots of the newly planted trees the tractor wheel is driven over the roots. Extreme care should be taken not to drive on the trees themselves. This is a fast, simple, inexpensive method. Whatever method is used in planting, it is most important that the soil be packed firmly around the roots so they will not dry out.

If you cannot plant trees or cuttings immediately, untie the bundles and place the trees or cuttings in a trench on the north side of a building or shelterbelt. The roots of the trees should be covered and packed with moist soil, and the cuttings completely buried in moist soil to prevent drying.

TYPES OF PLANTING:

(1) Farmstead Planting:

The two main windbreaks are on the sides of the farm to give maximum protection against the prevailing winds. A windbreak may be anywhere from one row to a dozen, depending on the farmer and land available. Always prepare a definite and complete plan of the tree planting program before any of the work is started. When preparing the plan, keep in mind the "Hints" listed below.

(2) Field Shelter Belts:

Before planting you should have a thorough knowledge of prevailing summer and winter winds and a willingness to modify farming operations. Summerfallow for one year. For a single row of trees, a strip of land 15 to 20 feet wide is necessary. Field shelterbelts need not be closer together than 30 to 40 rods. Trees should not be pruned, as growth near the ground level is essential if full benefits of the windbreak are to be realized. Trees should be cultivated during the early years of growth and protected against livestock.

One type of field shelterbelt is caragana alone, or caragana spaced one foot apart with every fifth or tenth tree a poplar or other tree. Never use evergreens in this type of planting. This arrangement gives added height to the windbreak. There is reason to hope that Manchurian elm will be satisfactory in field shelterbelts. Maple, ash and other broad leaf trees are doing well at the present time. Russian Olive, buffalo berry and Manchurian elm may be tried where the soil is alkaline.

Trees such as Nanking cherry, choke cherry, wild plum, villosa lilac and Mayday may be tried in portions of the field shelterbelt. These trees will encourage bird life, thus reducing the insect population. Plant at right angles to prevailing winds. North and south plantings are favored by most farmers.

(3) Roadside Planting:

It is estimated that by planting permanent snow fences, the cost of keeping roads free from snow would be reduced by 50%. The start could be made where snow fences are now placed. This plan

could then be enlarged later when the benefits of these early plantings were realized. **The trees should be planted 125 feet from the fence line to ensure best results.**

TREES AND SHRUBS THAT CAN BE USED:

- (1) Caragana; lilac; honeysuckle — fast growing, planted 1½ to 3 feet apart.
- (2) Poplar (male); willow; Manitoba maple; Manchurian elm — fast growing, planted 4 to 8 feet apart.
- (3) Green ash; American elm and Siberian larch — slower growing, planted 6 to 8 feet apart.
- (4) Evergreens — Colorado spruce, white spruce, lodge pole pine and Scotch pine, long lived, slower growing, planted 8 to 10 feet apart.

HINTS:

1. Do not plant evergreens in the same row as broad leaf trees.
2. Broad leaf trees may be mixed in one row.
3. Low growing shrubs on the outside row of the shelterbelt.
4. The front of the farmstead should be left open.
5. Specimen trees or a low hedge can be used for the front of the farmstead.
6. Never plant closer than one hundred feet to any building.
7. Five acres should be allowed for the farmstead.
8. Fence against livestock and guard against fire damage.
9. Leave room between rows of trees for cultivation, width varying depending on the machinery used for cultivation

For further information consult your local District Agriculturist, or write to the Field Crops Branch, Department of Agriculture, Edmonton.

